UCLA TECHNOLOGY DEVELOPMENT GROUP

INNOVATION MAGAZINE

WINTER 2025

VOLUME 16

TDG.UCLA.EDU

A message from AMIR NAIBERG

Dear Readers,

With the possible reduction of federal funding for research, TDG created a new webpage that provides information on industry funding. You can find this information here. Check it often as our team updates it on a regular basis. This list gives researchers direct links to funding opportunities with companies like Amazon, Microsoft, Gilead, J&J and more. At the university level, UCLA launched the Research Powers Progress campaign that promotes the social impact of research preformed at UCLA highlighting a different group each week.

TDG ended the year strong with $64.64M in licensing income and over 350 invention disclosures. This brought UCLA to the top rankings from *WIPO, Fast Company* and *Pitchbook*.

We are proud that Pelage Pharmaceuticals was named one of *Time's* Best Inventions of the Year. The company has also reached strong funding milestones and continues to grow. Rarity PBC entered an exclusive license with UCLA TDG to bring therapeutics for the ADA-SCID or "bubble baby disease" to the market, the underlying work performed by Dr. Kohn was recently featured in the NY Times. In addition, Dongwoon Anatech launched its collaboration with UCLA Dentistry Professor David T.W. Dong on the groundbreaking saliva-based cancer detection technology. While Horizon Surgical Systems, founded by Drs. Jean-Pierre Hubschman, Jacob Rosen and Steven Schwartz, made its mark with the first successful cataract eye surgery using robotics.

Lyell Immunopharma announced new clinical data from ongoing trials of its ronde-cel showing high rates of responses in patients with large B-cell lymphoma. This work is based on research performed at UCLA by Dr. Yvonne Chen.

On a rainy day in February, UCLA TDG hosted Climate Action Day – a capstone event that featured four research teams that presented their advancements for climate change. And in May of 2025, we hosted the first LABEST Week that combined our key conferences for MedTech and Bioscience to great success.

UCLA Ventures entered its second year for the Bruin Founders program that helps startups with training and mentorship. In addition, the department, in collaboration with CNSI and Anderson School, hosted several founder's mixers and other events that brought together startups, researchers, investors and service providers.

Artificial Intelligence or AI is a powerful technology that is starting to affect work processes and everyday life. At UCLA, we believe that AI can be used for good and created a special edition that highlights how different people across campus are integrating AI at the university.

As we come to the close of 2025, I want to thank three of our board members, Thomas Herget, Rajit Malhotra and Robert Pacifici for serving on the TDG Board. I would also like to welcome Michael Edelstein, Flavius Martin and Ah-Hyung "Alissa" Park to the TDG Board.

Join us at JPM, Tuesday, January 13th in San Francisco and watch for an announcement about an exciting quantum innovation event.

Amir Naiberg
Associate Vice Chancellor, CEO & President
UCLA Technology Development Group

UCLA TECHNOLOGY DEVELOPMENT GROUP

INNOVATION MAGAZINE

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CONTENTS

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Front Cover
Royce Hall
Photo: Alamy

UCLA TDG 2025 BY THE NUMBERS

Image generated by Google Gemini

All data provided by UCLA TDG

TOP INVENTION DISCLOSURES BY SCHOOL

SAMUELI SCHOOL OF ENGINEERING (SEAS)	68
College of Physical Sciences	36
Chemistry & Biochemistry	25
College of Life Sciences	24
Electrical Engineering	20
Physiology	19
Mechanical & Aerospace Engineering	14
Bioengineering	12
School of Dentistry	11
Chemical Engineering	7
Civil & Environmental Engineering	7
Statistics	7
Computer Science	5

DAVID GEFFEN SCHOOL OF MEDICINE (DGSOM)	116
Surgery	14
Neurology	11
Pharmacology	6
Cardiology	6
Hematology	6
Radiology Oncology	6
Ophthalmology	6
Pulmonary	5
Orthopedic Surgery	5
Med Radiology Science	5

WIPO 2025 GLOBAL RANKINGS

Top Publishing organization UCLA 12,600 articles

Los Angeles ranks 10th Largest innovation cluster in the world and 4th innovation cluster in the U.S.

UC ranked #2 Patent applications

Global Innovation Index 2025

Los Angeles, United States

Los Angeles is the fourth-ranked cluster, out of 22 American clusters, that falls within the top 100 innovation clusters in 2025. It filed **966 PCT applications**, published **3,507 scientific articles** and had **481 venture capital deals**, all per 1 million inhabitants over the latest five years, making it the:

10th largest innovation cluster in 2025

37th innovation cluster by intensity (relative to population density) in 2025

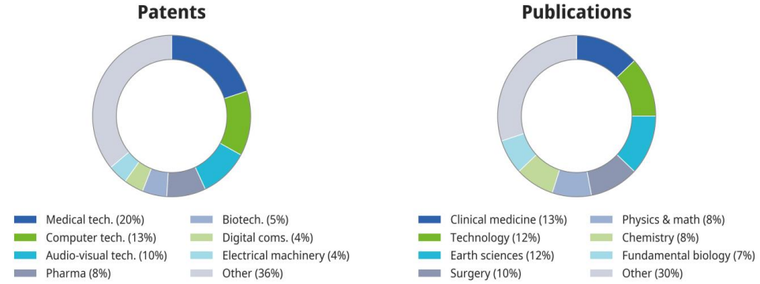
Top PCT applicants

		Patents	Share
1	SNAP	929	8%
2	UNIVERSITY OF CALIFORNIA	758	6%
3	BEIJING BYTEDANCE NETWORK TECH.	582	5%

Top publishing organizations

		Articles	Share
1	UNIVERSITY OF CALIFORNIA LOS ANGELES	12,600	29%
2	UNIVERSITY OF SOUTHERN CALIFORNIA	7,067	16%
3	UNIVERSITY OF CALIFORNIA IRVINE	6,126	14%

Top technology fields in Los Angeles



31% of Los Angeles's PCT patent applications are filed in collaboration with other inventors, with **Beijing**, **San Jose–San Francisco** and **San Diego** emerging as the top collaborative locations.

76% of Los Angeles's scientific articles are published in collaboration with other organizations, with the top three collaborating locations being **San Jose–San Francisco**, **Boston–Cambridge** and **New York City**.

Infographic Courtesy of WIPO - World Intellectual Property Organization

PITCHBOOK 2025 UCLA RANKINGS

#3 MBA Founders

Ranking	University	Founder count	Company count	Capital raised	vs 2024 overall rank
1	University of California, Berkeley	536	500	$17.4B	-
2	London Business School	478	443	$11.6B	-
3	University of California, Los Angeles (UCLA)	421	398	$10.8B	+1 ⬆
4	Tel Aviv University	352	336	$8.4B	-
5	University of Oxford	222	200	$7.0B	+2 ⬆
6	University of Michigan, Ann Arbor	186	184	$4.3B	-2 ⬇
7	Indian Institute of Management, Calcutta	153	142	$3.6B	+1 ⬆
8	Arizona State University, Tempe	151	148	$5.8B	-1 ⬇
9	University of Virginia, Charlottesville	143	139	$4.9B	-
10	Tsinghua University	135	133	$10.5B	+1 ⬆

#4 Top Public University Entrepreneur List

Ranking	University	Founder count	Company count	Capital raised	vs 2024 overall rank
1	University of California, Berkeley	1,893	1,577	$129.4B	-
2	University of Cambridge	1,488	1,243	$44.0B	-
3	University of Oxford	1,410	1,171	$45.1B	-
4	University of California, Los Angeles (UCLA)	1,022	881	$29.9B	-
5	Tel Aviv University	929	741	$19.7B	-
6	Imperial College London	897	748	$14.4B	+2 ⬆
7	University of Texas, Austin	818	716	$25.3B	-2 ⬇
8	University of Michigan, Ann Arbor	813	687	$28.6B	-2 ⬇
9	Tsinghua University	697	639	$39.8B	-
10	University of Toronto	649	514	$80.4B	+3 ⬆

#5 Female Founders

Ranking	University	Founder count	Company count	Capital raised	vs 2024 overall rank
1	University of California, Berkeley	272	249	$10.3B	-
2	University of Cambridge	220	204	$5.3B	+1 ⬆
3	University of Oxford	207	189	$2.4B	-
4	London School of Economics	129	126	$1.8B	+1 ⬆
5	University of California, Los Angeles (UCLA)	123	109	$3.3B	-1 ⬇
6	University of Michigan, Ann Arbor	98	91	$2.5B	-1 ⬇
7	Imperial College London	95	89	$902M	+4 ⬆
8	London Business School	94	90	$866M	+1 ⬆
9	Tel Aviv University	85	75	$1.5B	+1 ⬆
10	University of Toronto	80	74	$2.2B	+4 ⬆

INDUSTRY RESEARCH FUNDING OPPORTUNITIES

Don't miss out on our Industry Research Funding Opportunities page!

Discover amazing awards and grants from top companies like Amazon, Amgen, J&J, Gilead, Merck, NVIDIA, Samsung, and many more. Explore how to get funding for your research from these industry giants!

amazon AMGEN Johnson&Johnson GILEAD MERCK NVIDIA SAMSUNG

OSAGE UNIVERSITY PARTNERS

UCLA TECHNOLOGY DEVELOPMENT GROUP

OUP INVESTMENTS IN UCLA COMPANIES

226
Active Startups

10,427
Jobs Created

Source OUP

FAST COMPANY 2025

UCLA RANKS #42 IGNITION SCHOOL - SHAPING FUTURE ENTREPRENEURS AND INNOVATORS

Rank	University	Location	Enrollment
38	**Princeton University**	Princeton, New Jersey	< 20,000
39	**Washington University**	St. Louis, Missouri	< 20,000
40	**University of Colorado, Boulder**	Boulder, Colorado	20,000-50,000
41	**Georgia Institute of Technology**	Atlanta, Georgia	> 50,000
★ 42	**University of California, Los Angeles**	Los Angeles, California	20,000-50,000
43	**Boston College**	Chestnut Hill, Massachusetts	< 20,000
44	**McGill University**	Montreal, Quebec	20,000-50,000
45	**London Business School**	London, England	< 20,000

Lyell™

Image courtesy of Lyell

LYELL IMMUNOPHARMA, INC. is a clinical-stage company advancing a pipeline of next-generation chimeric antigen receptor (CAR) T- cell therapies for patients with cancer.

During the 67th American Society of Hematology (ASH) Annual Meeting, presentations were made of new clinical and translational data of patients with large B-cell lymphoma (R/R LBCL). These patients are part of an ongoing clinical trial of rondecabtagene autoleucel (ronde-cel, also known as LYL314).

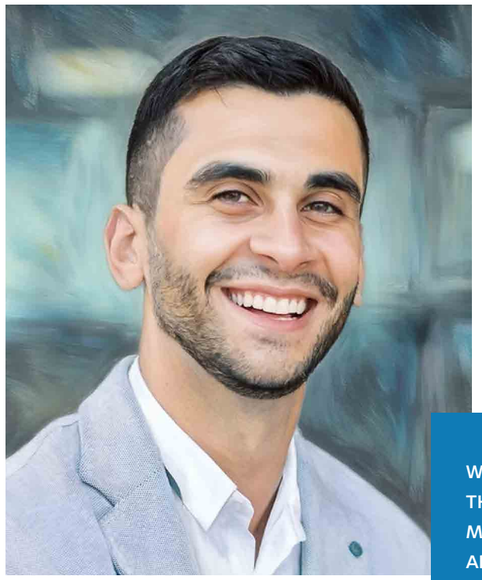
Ronde-cel is a CAR T-cell product candidate that is currently in development for R/R LBCL patients. Through a proprietary manufacturing process, Ronde-cel CAR T are designed to enhance antitumor activity.

The underlying research program IP was exclusively licensed from UCLA Technology Development Group.

The collected data showed strong response rates with the U.S. Food and Drug Administration (FDA) providing Regenerative Medicine Advanced Therapy or RMAT designation that allows ronde-cel to be used for second line and third line treatment of these patients.

"These data from the ongoing clinical trial showing high rates of durable complete responses along with a manageable safety profile in patients with high-risk large B-cell lymphoma represent the potential of ronde-cel to improve patient outcomes," commented Sarah M. Larson, MD, Associate Professor, Department of Medicine, Medical Director, Immune Effector Cell Therapy Program, Division of Hematology/Oncology, David Geffen School of Medicine at UCLA. "The two pivotal trials underway, including the first-of-its kind head-to-head CAR T-cell trial, are expected to provide a comprehensive and robust evaluation of the potential for ronde-cel to demonstrate differentiated benefit over approved CD19 CAR T-cell therapies."

Read the official press release here.



Paul Ayoub

Photo courtesy of Rarity PBC

Exclusive License from UCLA TDG to Advance a Life-Saving Gene Therapy for ADA-SCID

> WE ARE HONORED AND HUMBLED TO PARTNER WITH UCLA TO BRING THIS THERAPY TO THE WORLD. THIS IS MORE THAN JUST A SCIENTIFIC MILESTONE; IT REPRESENTS A TURNING POINT FOR FAMILIES AFFECTED BY ADA-SCID AND THE POSSIBILITY OF A FUTURE WITH GREATER CERTAINTY.
>
> — DR. PAUL AYOUB, CEO OF RARITY PBC

RARITY PBC, a pioneering Public Benefit Corporation dedicated to availability of life-changing medical technologies, announced today that it has entered into an exclusive licensing agreement with the UCLA Technology Development Group (TDG). This landmark agreement grants Rarity PBC the rights to a groundbreaking gene therapy for adenosine deaminase severe combined immunodeficiency, or ADA-SCID, a devastating genetic disorder affecting infants.

The licensed therapy offers a profound new hope for babies born with ADA-SCID, a condition often referred to as "bubble baby disease" due to the extreme isolation and protection required for affected children. This innovative approach was invented and developed by UCLA researcher Dr. Donald Kohn in collaboration with researchers at University College London. Approximately 70 children's lives have been transformed by this curative treatment.

The therapy works by overcoming the genetic mutation that causes ADA-SCID. It involves a highly personalized process: collecting a patient's own blood-forming stem cells and then using a viral vector to deliver a normal, functional copy of the ADA gene into those cells. Once corrected, the stem cells are reintroduced into the patient's body, where they can produce all necessary blood cell types, including the immune cells the child needs to fight infections and live a healthy life.

"We are honored and humbled to partner with UCLA to bring this therapy to the world," said Dr. Paul Ayoub, CEO of Rarity PBC. "This is more than just a scientific milestone; it represents a turning point for families affected by ADA-SCID and the possibility of a future with greater certainty. At Rarity PBC, we are committed to responsibly advancing life-saving treatments, guided by urgency, rigor, and a deep focus on patient impact."

"I am so happy that Rarity PBC will be working to move this curative therapy to FDA approval to help make it available to ADA SCID patients across the U.S.," said Kohn.

As a Public Benefit Corporation, Rarity PBC is a for-profit company with a legally mandated public benefit mission. This unique model allows the company to combine market-driven efficiency with a responsibility for expanding long-term sustainability to rare disease therapies. The exclusive license from UCLA TDG is a critical step in advancing ADA-SCID treatment and reflects Rarity PBC's role in translating breakthrough science into sustainable patient impact.

TIME

Pelage Pharmaceuticals has a Phenomenal Year

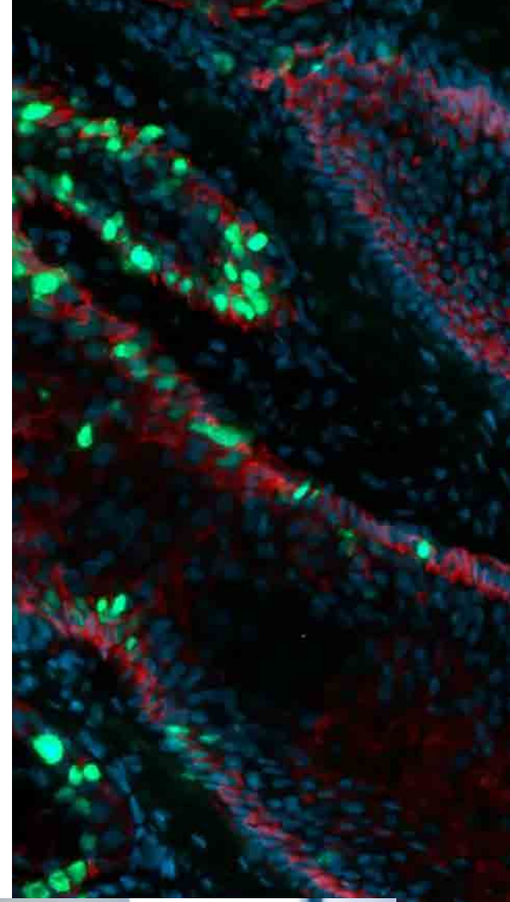
PELAGE PHARMACEUTICALS is a UCLA founded company that develops regenerative medicines for hair loss based on stem cell biology.

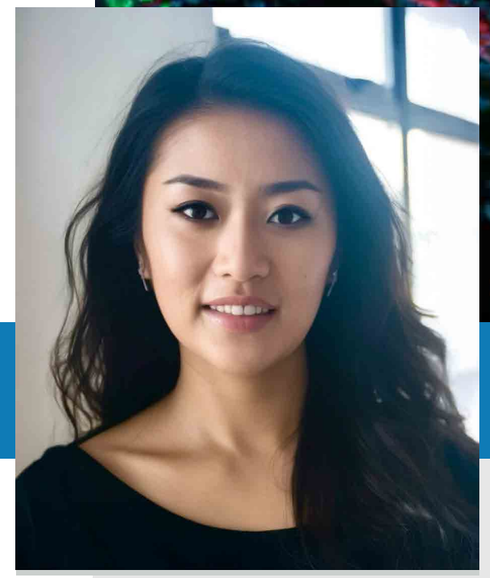
The company had an exceptional year and was recently named one of *Time*'s *Best Inventions of 2025.* The company also announced $120 Million Series B financing co-led by ARCH Ventures and GV (Google Ventures).

Below is the excerpt from *TIME*:

PP405 is a topical, non-hormonal treatment that activates dormant stem cells in hair follicles to regrow hair back to fullness. Clinical trials have shown success, though the drug may not work in the end stages of balding if the follicle is scarred. Pelage Pharmaceuticals is still awaiting further trial results before it can receive FDA approval, but the drug's success could open doors for future therapies. "It's not covering up the symptoms, it's targeting the underlying biology," says Pelage Pharmaceuticals chief medical officer Christina Weng.

Correction, Oct. 9
The original version of this story misstated the limited of the drug's efficacy. It may not work in the end stages of balding if the follicle is scarred, but it doesn't only work in the early stages of balding.





> IT'S NOT COVERING UP THE SYMPTOMS, IT'S TARGETING THE UNDERLYING BIOLOGY.
>
> — CHRISTINA WENG, PELAGE PHARMACEUTICALS CHIEF MEDICAL OFFICER

Christina Weng

Photos courtesy of Pelage Pharmaceuticals

UCLA School of Dentistry and Dongwoon Anatech Launch Collaboration **TO ADVANCE SALIVA-BASED CANCER DETECTION TECHNOLOGY**

Sponsored Research Agreement will provide up to $787,500 annually to support Dr. David T.W. Wong's Electric Field-Induced Release and Measurement (EFIRM) platform.

Photo courtesy of UCLA TDG

Photo L to R: Amir Naiberg, AVC, CEO and President, UCLA Technology Development Group, Dr. Wong, Professor, UCLA School of Dentistry and Dong-Cheol Kim, CEO, Dongwoon Anatech

THE UCLA SCHOOL OF DENTISTRY has entered a three-year sponsored research agreement with South Korean semiconductor firm Dongwoon Anatech to advance the development of UCLA's Electric Field-Induced Release and Measurement (EFIRM) platform—a non-invasive, saliva-based technology designed to detect cancer and other diseases early.

The agreement, signed July 18 by representatives from UCLA, UCLA Technology Development Group, and Dongwoon Anatech, formalizes a partnership first outlined in a March 2025 memorandum of understanding. Under the terms, Dongwoon Anatech will provide up to $787,500 annually to support research led by Dr. David T.W. Wong, professor at the UCLA School of Dentistry and director of its Center for Oral/Head & Neck Oncology Research.

"This collaboration reflects our shared vision to make early disease detection faster, simpler, and more accessible around the world," said Dr. Wong. "Dongwoon Anatech's support brings us closer to realizing EFIRM's potential in clinical settings."

EFIRM is a liquid biopsy platform that uses proprietary technology to isolate and analyze biomarker signals directly from biofluids such as saliva, without the need for complex sample preparation. In prior studies, Dr. Wong's team demonstrated EFIRM's ability to identify tumor-specific mutations in saliva with high sensitivity and specificity, particularly for non-small cell lung cancer.

The new research effort will begin with optimizing various protocols for Dongwoon Anatech's saliva-based glucose monitoring system, **D-SaLife®**, in patients with and without diabetes, using clinical samples from hospitals in both the U.S. and South Korea. Later phases will focus on the development and clinical validation of **EFIRM I**, a fully automated diagnostic device designed to detect salivary biomarkers for cancers such as lung, gastric, and oral cancer.

UCLA and Dongwoon Anatech also plan to co-develop **EFIRM II**, a next-generation platform incorporating semiconductor-based design and compact diagnostic cartridges, laying the groundwork for scalable manufacturing and point-of-care use.

Dr. Wong has received more than $29 million in funding from the National Institutes of Health and other agencies to support EFIRM research since 2002.

The agreement was signed by Dr. Wong; Dongwoon Anatech CEO **Dong-Cheol Kim**; UCLA Technology Development Group (TDG) Associate Vice Chancellor, CEO and President **Amir Naiberg**; and TDG Business Development Officer **Thibault Renac**.

Image courtesy of Dongwoon Anatech

> **THIS COLLABORATION REFLECTS OUR SHARED VISION TO MAKE EARLY DISEASE DETECTION FASTER, SIMPLER, AND MORE ACCESSIBLE AROUND THE WORLD. DONGWOON ANATECH'S SUPPORT BRINGS US CLOSER TO REALIZING EFIRM'S POTENTIAL IN CLINICAL SETTINGS.**
>
> — DAVID T.W. WONG, D.M.D., D.M.SC.
> PROFESSOR, DIRECTOR OF THE UCLA CENTER FOR ORAL/HEAD & NECK ONCOLOGY RESEARCH (COOR)

UCLA Research Leads to **WORLD'S FIRST ROBOTIC-ASSISTED CATARACT SURGERY**

Photo courtesy of Horizon Surgical Systems

Dr. Uday Devgan at the surgical cockpit, assisted by Dr. David Lozano Giral, performing the first human robotic cataract procedure as part of Horizon's clinical study

A SURGICAL ROBOTICS SYSTEM developed by UCLA engineers and physicians has achieved a major breakthrough in ophthalmic surgery. Horizon Surgical Systems, a UCLA spin-off that licensed the technology, successfully completed the world's first human clinical trial of robotic-assisted cataract surgery.

Cataracts — clouding of the eye's natural lens that can lead to vision impairment and ultimately blindness if left untreated — affect approximately 94 million people worldwide. The condition remains the leading cause of global blindness, accounting for about 33 percent of all blind people. Cataract surgery is often cited as the most frequently performed surgery in the world, with more than 26 million procedures a year worldwide. Traditional cataract surgery, while common, poses significant challenges for surgeons, requiring visualization of transparent ocular tissues and extreme precision due to the small (few microns) dimensions of the anatomical structures.

Horizon Surgical Systems announced Oct. 8 the results of its first-in-human study in which 10 patients successfully underwent robotic-assisted cataract surgery for the first time in the world with no adverse events. Dr. Uday Devgan, a former professor of ophthalmology, and Dr. David Lozano Giral, an assistant clinical professor of ophthalmology and a director of Ocular Trauma service, at the Jules Stein Eye Institute at UCLA, performed the surgery, marking a historic milestone in ophthalmic surgical robotics.

As part of the study, each patient received a standard cataract operation — removal of the clouded natural lens followed by implantation of an artificial lens — with the Polaris robotic platform. The surgeon sits at a surgical cockpit located in the operating room and controls the instruments inside the eye. The cockpit incorporates a specialized input device that provides real-time augmentation, guidance overlays and tactile paddles while the surgeon views a 3D monitor displaying ocular anatomy captured through multimodal imaging systems. Surgical robotic arms, attached to a cart near the patient's head, use interchangeable microsurgical tools attached to the robotic system to make small corneal incisions and remove the cataract-affected lens. The surgeon then implants a clear, patient-specific artificial lens to restore 20/20 vision.

The breakthrough represents more than a decade of multidisciplinary collaboration between engineers at the UCLA Samueli School of Engineering and physicians at the UCLA Stein Eye Institute that was funded in part by multiple National Institutes of Health awards. After more than 15 years of incubation, Horizon was co-founded in 2021 by four current and former UCLA faculty members, including Jacob Rosen, a professor of mechanical and aerospace engineering and bioengineering and director of the Bionics Lab, Tsu-Chin Tsao, a distinguished professor of mechanical and aerospace engineering and director of the Mechatronics and Controls Laboratory, Dr. Jean-Pierre Hubschman, a former professor of ophthalmology at UCLA and founder and former director of the Advanced Robotic Eye Surgery Laboratory and Dr. Steven Schwartz, former chief of the Retina Division at the UCLA Stein Eye Institute. Many of Horizon's employees are former graduate students of the company's UCLA founders.

In a recent preprint titled "High-Precision Surgical Robotic System for Intraocular Procedures," Rosen, Tsao and Hubschman report that laboratory testing demonstrated a tooltip accuracy of 0.053 millimeters, highlighting the technology's potential to improve safety and consistency in complex eye surgeries, including cataract procedures.

Rosen attributes the breakthrough to two duos: one focused on disciplines and the other on institutions. From a disciplinary perspective, medicine is a problem-rich environment, while engineering is a solution-rich one. Combining them enables development of relevant and innovative technology. From an institutional perspective, academia provides an intellectually rich setting where researchers can refine both their scientific and technological approaches as well as intellectual property. Industry, in contrast, is fast-paced, emphasizing rapid design cycles to drive toward a finished product.

"Horizon is the result of the privilege of operating within both sides of these duos," Rosen said. "The professional journey of all of Horizon's founders — from a concept sketched on a napkin to embracing the first patient who underwent the first robotic cataract procedure — was profoundly meaningful and deeply impactful."

The robotic technology was licensed to Horizon through UCLA Technology Development Group, which manages the university's intellectual property and helps bring innovations from the lab to the marketplace.

"This milestone demonstrates the strength of UCLA's innovation ecosystem, where cutting-edge engineering, medical expertise and entrepreneurial support come together to improve lives," said Amir Naiberg, associate vice chancellor and president and CEO of UCLA Technology Development Group. "Horizon's success underscores the critical role of university technology transfer in advancing both science and patient care."

The completion of the first clinical study marks a pivotal step in the clinical regulatory process toward broader adoption of robotic-assisted ophthalmic surgery. Horizon is continuing to refine the Polaris system and plans to pursue additional clinical studies and regulatory approval.

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UCLA Samueli School of Engineering Newsroom

> **"THE PROFESSIONAL JOURNEY OF ALL OF HORIZON'S FOUNDERS — FROM A CONCEPT SKETCHED ON A NAPKIN TO EMBRACING THE FIRST PATIENT WHO UNDERWENT THE FIRST ROBOTIC CATARACT PROCEDURE — WAS PROFOUNDLY MEANINGFUL AND DEEPLY IMPACTFUL."**
>
> — JACOB ROSEN,
> PROFESSOR, MECHANICAL AND AEROSPACE ENGINEERING
> BIOENGINEERING

UCLA TDG
CONFERENCE AND OUTREACH WRAP-UP 2025

LABEST BEST LABEST

UCLA Technology Development Group

MedTech 05 · 21 · 2025

Bioscience 05 · 22 · 2025

It was a transformative year for the UCLA TDG marketing department. In February 2025, the organization decided to bring together the MedTech conference and the Los Angeles Bioscience Ecosystem Summit aka LABEST under one umbrella. The new comprehensive brand is now known as LABEST Week. We quickly created a new graphic identity and launched registration for the multi-day event. This is a recap of LABEST Week 2025, plus you can find videos of the conference here.

Monday, May 19th

BCLA hosted the Bioscience Talent Connection event at UCLA's Ackerman Union. This was the biggest turnout for the event compared to years past when it was held across town. Graduate and PhD students participated from various higher ed institutions including USC, Caltech, UCLA, LA City College and more. Attendees were able to learn from panel talks and network with regional companies that were actively recruiting.

Tuesday, May 20th

UCLA TDG's Research and Industry Alliances hosted a training workshop on how to secure industry sponsored research. The talk was followed by the quarterly Founder's Mixer organized by UCLA Ventures and CNSI. Over 200 people actively networked while enjoying some tasty bites and refreshing beverages.

Wednesday, May 21st

This was the first year the MedTech Conference took place in May under the LABEST MedTech banner. There were over 400 registered attendees who participated in panel talks, pitches and networking throughout the day. Highlights included keynote speakers, Lisa Earnhardt, VP and President of Med Devices at Abbot and Peter Schulam, CSO of Medtech J&J. The MedTech Showcase hosted by KPPB involved 13 startups pitching for a $10K prize! The winner was Aurora by Persperity Health. A non-invasive patch that continuously tracks fertility hormones in near real time, bridging the gap between occasional blood tests and the daily fluctuations critical to IVF success.

A VIP Reception was held on the Luskin Terrace with a welcome by Amgen. Pearl Cohen's Mark Cohen announced the winners of the Poster Contest from each of the 7 categories. The reception was followed by an exclusive VIP Dinner held at Lulus where over 100 dined in the courtyard of the Hammer Museum.

Thursday, May 22nd

Over 950 registrants participated in LABEST Bioscience. The morning opened strong with keynote speeches from the new UCLA Chancellor Julio Frenk, Chaiman and CEO of Gilead Sciences, Daniel O'Day and Executive VP of University of Pennsylvania Health System, Jonathan A. Epstein. There was a powerful story shared by Laurie Adami with Kite's EVP Cindy Perettie and the morning ended with Bellco Capital Chair Arie Belldegrun's annual panel "The Business of Bioscience". After lunch, over a dozen breakout sessions took place from the Startup Ecosystem Showcase to Developments in Stem Cell research to BioSuccess in LA. The day ended with an all-attendee reception on the Luskin Terrace with students from UCLA Jazz playing us out until next year.

Marketing Outreach

Video content was created for our YouTube followers and subscribers. The channel was updated with 13 new Inventor Profiles where UCLA PIs talk about their latest research. Plus, over 40 videos from LABEST Week 2025 were posted and included keynote speeches and panels from the event.

Make sure you sign up for Tech News to keep up on the latest technologies, research funding opportunities, networking events and startup company milestones. And don't forget to follow us on social media - LinkedIn, Instagram, YouTube, X and Facebook.

All photos by Heromade

UCLA Technology Development Group

Climate Action Day

Innovation & Entrepreneurship

Thursday, February 13, 2025

UCLA Campus

We encourage you to watch the Climate Action Day talks and panels on the UCLA TDG You Tube Channel. Thank you to all the speakers and attendees who shared the day with us!

Climate Action Day Wrap-Up

CLIMATE ACTION DAY took place on a very rainy day back in February 2025. Despite the inclement weather, over 100 people attended the event.

In 2022, the State of California designated grants to the UC to develop innovations that address critical needs across the state. Nick Anthis, Senior Program Officer, Research Grants Program Office, UCOP, provided an overview of the climate action initiative.

UCLA scientists worked to provide novel solutions to some of our greatest climate challenges. The capstone event featured 4 UCLA teams that presented their research.

Enabling Electric Vehicle Adoption Through Fast-Charging Batteries
Sarah H. Tolbert, Professor, Chemistry and Biochemistry and Bruce S. Dunn, Distinguished Professor, Materials Science and Engineering, UCLA

Photovoltaics/Photosynthesis Integration for High-Efficiency Eco-System Producing Energy and Food
Yang Yang, Distinguished Professor Materials Science & Engineering, UCLA

Carbon-Negative, Energy-Positive Water Recycling via a Combined Aerobic Membrane Bacterial-Algal Reactor (CAMBAR)
Eric Hoek, Professor, Civil and Environmental Engineering and Shaily Mahendra, Professor, Civil and Environmental Engineering, UCLA

Durable Supercool Radiative Cooling Paints for Climate Resilience to Extreme Heat
Aaswath P. Raman, Associate Professor Materials Science and Engineering, UCLA

The keynote speaker was Glen Sproul dit MacDonald, FRSC Distinguished Professor Endowed Chair in California & The American West Department of Geography, UCLA. MacDonald spoke about the gradual heating of the earth and the rising waters of the oceans and how these occurrences have impacted climate change.

A special panel *Moving Towards LA28: Acceleration of Innovation in Preparation for the Olympics* touched on the transportation goals for the upcoming Olympics. UCLA's Chief Sustainability Officer, Nurit Katz, led the conversation with Juan Matute, Deputy Director, UCLA Institute of Transportation Studies and Michael Samulon, Deputy Director of Electrification, Los Angeles Mayor's Office of Energy & Sustainability.

The day wrapped up with the *Investing in Sustainability* panel with Dr. Min-Yi Shih, Executive Committee Member, Tech Coast, Aaron Fyke, Founder and Managing Partner, Thin Line Capital, DC Paltor, Executive Committee Member, Tech Coast Angels and Danaé Robert, Principal, At One Ventures.

AT UCLA, RESEARCH IS FUELING BREAKTHROUGHS that shape a brighter future. From developing new treatments that save lives, to advancing technologies that transform daily living, to exploring the mysteries of the universe, our investigators are driving discoveries that benefit people everywhere.

Each study carries the potential to improve health, strengthen communities, and expand knowledge in ways that touch us all. With sustained support, UCLA researchers continue to turn bold ideas into real-world impact—creating hope, opportunity, and progress for generations to come.

Visit the Research Powers Progress site to learn more.

Saving hearts, one machine at a time

When a patient's heart or lungs fail, time becomes the ultimate enemy. For Dr. Abbas Ardehali, Director of the Heart, Lung and Heart-Lung Transplant Programs at UCLA's David Geffen School of Medicine, that race against time has defined decades of groundbreaking research and innovation.

Better treatments for infertility

UCLA reproductive scientist Amander Clark is advancing infertility treatments by studying how stem cells develop into egg and sperm precursors, aiming to create functional reproductive cells in the lab.

Giving children with immunodeficiency a chance to lead a normal life

For children with the rare condition ADA-SCID, day-to-day activities like going to school or playing with friends can lead to dangerous, life-threatening infections. If untreated, ADA-SCID can be fatal within the first two years of life. A blood stem cell gene therapy co-developed by UCLA's Dr. Donald Kohn restored immune function in 59 of 62 children with ADA-SCID, with no serious complications reported.

Breakthrough highlighted stories

ucla.edu/research

SPECIAL EDITION

AI FOR GOOD

Photo Courtesy of UCLA Department of Theater and REMAP

AI or artificial intelligence is a hot button topic in today's society. The mention of this technology seems to cause great divides among family, friends and colleagues. In general, one group believes that AI is a threat that will end with livelihoods being replaced while others believe that it can dramatically enhance processes and work that will be transformative.

Initially, Innovation Magazine set out to write a short article on how AI can be used for good but once the process got started, the piece became much bigger than anticipated so we decided to put out a special edition titled AI for Good that you can find **here**.

A simple definition of AI

According to *Britannica*, artificial intelligence or AI is the ability of a digital computer or computer-controlled robot to perform tasks commonly associated with intelligent beings. The term is frequently applied to the project of developing systems endowed with the intellectual processes characteristic of humans, such as the ability to reason, discover meaning, generalize, or learn from previous experience.

It's important to understand that there are many facets to the broad concept of AI. But to break it down in simple terms, Artificial Intelligence first learns, then begins to function, and grows in its capability. It then uses technology for its tasks and has various applications in the real world.

Currently, we are in the very early phase of AI known as Artificial Narrow Intelligence where you can prompt an AI platform like ChatGPT and it will provide an answer based on the single task. AI works sequentially as it builds output based on data. The most familiar AI terms refer to the technology of Machine Learning where algorithms are used to analyze data and learn patterns and Generative AI that produces text, visuals and/or audio when prompted.

See AI generated Appendix for more.

Experienced Thought Leaders Join

UCLA TDG BOARD OF DIRECTORS

UCLA TECHNOLOGY DEVELOPMENT CORP (UCLA TDC) is excited to announce the addition of three highly accomplished leaders to its Board of Directors: Michael Edelstein, Flavius Martin, and Ah-Hyung "Alissa" Park. These strategic appointments significantly enhance the Board's expertise in global technology, entertainment, life sciences, and engineering solutions, ensuring robust guidance for UCLA's thriving innovation ecosystem.

"We are excited to welcome Michael, Flavius, and Alissa to the TDC Board," said Andrei Iancu, Chairman, UCLA TDC. "Their combined experience and rich background will be a strong addition, bringing unique perspectives from the highest levels of global media, pharmaceutical research, and academic leadership. Their counsel will be vital as we expand the impact of UCLA's research and accelerate the translation of Bruin innovations and creativity into successful products and companies."

MICHAEL EDELSTEIN

President, The Micheal Edelstein Company

Michael Edelstein is a seasoned strategic advisor with over two decades of leadership experience in media, technology, and intellectual property (IP). He currently advises early- and growth-stage companies in sectors including AI, health tech, gaming, and consumer platforms.

FLAVIUS MARTIN

Executive Vice President of Research, Gilead

Flavius Martin brings nearly 20 years of transformative leadership in the biopharmaceutical industry to the Board. As the Executive Vice President of Research at Gilead, he oversees the company's innovative research and preclinical programs across all therapeutic areas, driving both internal discovery and external opportunities.

AH-HYUNG "ALISSA" PARK

Ronald and Valerie Sugar Dean, UCLA Samueli School of Engineering

Ah-Hyung "Alissa" Park is the Ronald and Valerie Sugar Dean of the UCLA Samueli School of Engineering and a professor of chemical and biomolecular engineering. She also holds a joint appointment in the Department of Civil and Environmental Engineering. Her expertise is in sustainable energy and materials conversion, with an emphasis on carbon capture, utilization and storage to address climate change.

Read new board of directors' full bios here

UCLA TDG TECH FELLOW SPOTLIGHTS

UCLA Technology Development Group would like to thank all of our hard working students. The department has expanded our fellowship program and continues to provide mentorship and opportunities for these bright minds.

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FUELING THE FUTURE:

UCLA VENTURES CONTINUES TO SUPPORT INNOVATION

Investing in Innovation When It Matters Most

IN A TIME WHEN HIGHER EDUCATION faces unprecedented headwinds—from tightening federal budgets to heightened scrutiny of research funding—UCLA Ventures stands as a critical link between discovery and impact. As part of the UCLA Technology Development Group (TDG), UCLA Ventures empowers faculty, students, and alumni entrepreneurs to transform world-class research into real-world solutions.

Through its growing community of investors, mentors, and corporate partners, UCLA Ventures accelerates the development of UCLA-affiliated startups across industries spanning AI, health, sustainability, and advanced technologies. Each gift to UCLA Ventures directly fuels these efforts, supporting founder education, mentorship, and investor engagement initiatives that strengthen UCLA's innovation pipeline.

Now is the time to act. In this challenging landscape, private support plays an essential role in sustaining UCLA's leadership in innovation.

"UCLA Ventures connects innovators to funding, educational, and mentorship resources—empowering Bruins to turn ideas into scalable ventures."

MAKE A LASTING IMPACT.

Tech Week: Bruins at the Forefront of Innovation

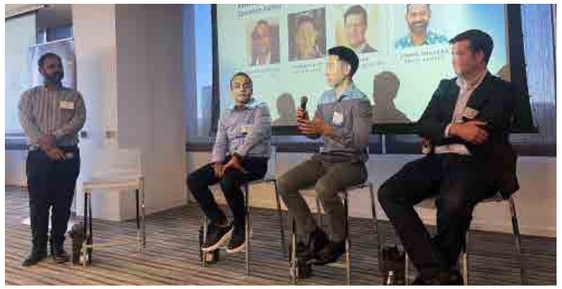
UCLA Ventures continued to expand its visibility at Tech Week 2025, leading anchor events in both San Francisco and Los Angeles that celebrated the University's entrepreneurial impact. In San Francisco, UCLA Ventures hosted *Vertical AI: The Future of Scientific Innovation*, a standout event exploring how artificial intelligence is advancing discovery across science, health, and industry. The program featured a panel moderated by Vinnie Shahzad (Bruin Angels) featuring Sharad Aggarwal (Google Cloud), Jim Ryan (Morrison Foerster), and Sherwin Kuo (Fusion Fund & Cedars-Sinai) followed by a showcase of UCLA-affiliated startups applying AI to real-world problems:

- **AstraQua** – Builds adaptable AI and computing systems that support autonomous operations in challenging, resource-limited environments—from robotics to space technologies.
- **EndoFold**– Designs advanced biomolecular delivery platforms that aim to improve the precision and safety of therapeutic development in areas such as oncology and regenerative medicine.
- **EarlyDx** – Advances AI-driven blood-based diagnostics designed to enable earlier and more accurate disease detection, improving outcomes through faster insights.

A distinguished judging panel—including Sophia Zhao (Alumni Ventures AI Fund), Roberto Veronese (Accelera VC), and Anant Pai (General Catalyst)—provided tailored feedback to each presenting team, assessing innovation potential, technical maturity, and investor readiness.

Back in Los Angeles, UCLA Ventures participated in *Face to Face with Investors* – co-hosted by Bruin Angels, Tech Coast Angels, and the UCLA Anderson School of Management. The event opened with a panel featuring a group of UCLA founders and startups, who shared how the ecosystem has equipped them with the mentorship, resources, and networks needed to scale their ventures. The panel was followed by "speed-dating"–style investor meetings, where founders engaged in focused, high-value conversations with active angel investors from across Southern California.

From NorCal to SoCal, the message was clear: UCLA founders are not just participating in the innovation economy — they are defining it.



Panelists and founders gather at UCLA Ventures' "Vertical AI" event during SF Tech Week, highlighting AI's transformative role in science and health.

Bruin Founders: Forward Momentum

Cohort 2 founders engage in a mentorship session at UCLA Ventures' Bruin Founders Workshop.

Now in its second year, the Bruin Founders Program continues to serve as UCLA Ventures' flagship initiative for nurturing early-stage founders. Cohort 2 is building on the momentum of its inaugural class with a full calendar of workshops focused on topics like brand positioning, competitive landscape, and fundraising readiness—culminating in an investor showcase.

By pairing UCLA innovators with experienced Mentors-in-Residence, the program provides the structure, accountability, and community needed to translate ideas into investable ventures. The progress to date underscores the program's unique value in connecting campus innovation with commercial potential.

"Bruin Founders reflects the One UCLA spirit—uniting innovators who transform bold ideas into ventures that create lasting impact."

BRUIN FOUNDERS MENTORS

2025-26 COHORT

Chad Billmyer

David Hawks

Meriko Kawashima

Nikki Win

2024-25 COHORT

Kiran Chandra

Alan Crunkleton

Shou Wong

UCLA VENTURES
UCLA Technology Development Group

Fuel. Ignite. Impact.

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Your donation directly supports UCLA Ventures and the next generation of leaders.

Contact us.

uclaventures@tdg.ucla.edu

All photos courtesy of UCLA TDG

Looking Ahead:

Life Science Innovation at JPM Health Conference 2026

UCLA Ventures will kick off 2026 at the JPM Health Conference in San Francisco, hosting a Life Sciences Startup Showcase on January 13, sponsored by Morrison Foerster. The event will feature emerging UCLA-affiliated life science companies presenting to top investors and corporate partners, followed by an exclusive networking reception.

As the global life sciences community convenes at JPM, UCLA Ventures will highlight the University's leadership in translating groundbreaking research into therapies and technologies with real-world impact—a testament to the power of partnership between academia, philanthropy, and industry.

Investors and founders connect at UCLA Ventures' upcoming Life Sciences Showcase during JPM Health Conference 2026.

All photos courtesy of UCLA TDG

UCLA VENTURES
UCLA Technology Development Group

UCLA Investor Pitch Showcase at JPM

SAVE THE DATE!

Join us on January 13th for an exciting showcase featuring UCLA companies and technologies pitching their latest innovations. This event highlights groundbreaking work emerging from the UCLA ecosystem and offers a unique opportunity to see high-impact ventures in action. Proudly sponsored by Morrison Foerster, one of our valued SIAB partners.

Date: Tuesday, January 13th, 2026 @ 3:30-6:30pm PT

How: Register here.

Promo code: VENTURES_EARLY25 [$15 discount until 1/1/26]

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ATTENTION STARTUPS AND LICENSEES! UCLA TDG is proud to announce the UCLA TDG logo license program. The licensing initiative allows companies to use the "Licensed from TDG at UCLA" logo. The logo will help promote products, services or technologies derived from UCLA research and strengthen the visibility and credibility of licensed technologies.

For details on the "Licensed from" logo, visit tdg.ucla.edu and click on the "Trademark" dropdown.

Thank you for serving on the
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UCLA TDG would like to thank all the board members who have served for many years and provided valuable knowledge and guidance that has helped shape the organization

Thomas Herget

Rajit Malhotra

Robert Pacifici

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UCLA TECHNOLOGY DEVELOPMENT GROUP (TDG) promotes UCLA innovation, research, education and entrepreneurship to benefit society. Working with UCLA TDG helps facilitate the translation of UCLA discoveries into new products and services that create economic value to support UCLA's scholarly and educational missions. The UCLA TDG office manages a large portfolio of technologies and license agreements and has a rich history of startup company formation.

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